

WHAT IS CLAIMED IS:

1. A data access method used in a network system having several node devices connected for communications configured so that each node device can execute certain processing by accessing memories in said several node devices or cache memories at a higher access speed wherein

each node device

executing the speculative access to said memories in the system while reading out, from the tag memory, the tag information as the information related to the data storage status in said cache memories provided in the system, and

deciding whether or not to abolish the data acquired from said memories by said speculative access according to said tag information read out.

2. A data access method used in a network system having several node devices connected for mutual communications configured so that each node device can execute certain processing by reading out data from memories in said several node devices or cache memories at a higher access speed wherein

each node device

executing the speculative readout of the data from said memories in the node devices while reading out,

10 from the tag memory, the tag information as the
information related to the data storage status in said
cache memories provided in the system,

judging whether the same data as the data subject
to said speculative readout is in any of the cache
15 memories based on said tag information read out,

sending said speculative readout data to the
processor in the self node device when the same data as
the data subject to said speculative readout is not
found in any of the cache memories, and

20 acquiring, when the same data as the data subject
to said speculative readout is in one of the cache
memories, such data in said cache memory and sending
said data to the processor in the self node device.

3. A data access method used in a network system as
set forth in Claim 2 wherein

said speculative readout data is abolished when
said data found in the cache memory is acquired and sent
5 to the processor in the self node device.

4. A data access method used in a network system as
set forth in Claim 2 wherein

each node device speculatively reads out the data
from the memory in the self node device while reading
5 out said tag information from the tag memory.

5. A data access method used in a network system as set forth in Claim 2 wherein

each node device speculatively reads out the data from the memory in the other node device while reading out said tag information from the tag memory.

6. A network system having several node devices connected for communications configured so that each node device can execute certain processing by accessing memories in said several node devices or cache memories at a higher access speed wherein

each node device comprising

access means to speculatively access said memories in the system while reading out, from the tag memory, the tag information as the information related to the data storage status in said cache memories provided in the system and

judgment means to judge whether or not to abolish the data acquired from said memories by said speculative access according to said tag information read out.

7. A network system having several node devices connected by a communication mechanism for mutual communications configured so that each node device can execute certain processing by reading out data from memories in said several node devices or cache memories at a higher access speed wherein

each node device comprising

speculative readout means to execute the
speculative readout of the data from said memories in
the node devices while reading out, from the tag memory,
the tag information as the information related to the
data storage status in said cache memories provided in
the system,

a judgment means to judge whether the same data
as the data subject to said speculative readout is in
any of the cache memories based on said tag information
read out, and

a read data processing means which sends said
speculative readout data to the processor in the self
node device when the same data as the data subject to
said speculative readout is judged not existing in any
of the cache memories and, when the same data is judged
existing in one of the cache memories, acquires such
data in said cache memory and sends said data to the
processor in the self node device.

8. A network system as set forth in Claim 7 wherein
said data processing means abolishing said
speculative readout data when said data found in the
cache memory is acquired and sent to the processor in
the self node device.

9. A network system as set forth in Claim 7 wherein

said speculative readout means speculatively reads out the data from the memory in the self node device.

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10. A network system as set forth in Claim 7 wherein said speculative readout means speculatively reads out the data from the memory in the other node device.

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11. A network system as set forth in Claim 7 wherein said tag memory is provided in said communication mechanism.

12. A computer readable memory storing a data access program for controlling the data access in a network system having several node devices connected for mutual communications configured so that each node device can execute certain processing by accessing memories in said several node devices or cache memories at a higher access speed wherein

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said data access program executing

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speculative access processing for the memories in the system while reading out, from the tag memory, the tag information as the information related to the data storage status in said cache memories provided in the system and

processing to judge whether or not to abolish the

15 data acquired from said memories by said speculative
access according to said tag information read out.

13. A computer readable memory storing a data access
program for controlling the data access in a network
system having several node devices connected for mutual
communications configured so that each node device can
5 execute certain processing by reading out data from
memories in said several node devices or cache memories
at a higher access speed wherein

said data access program executing
speculative readout processing to read out the
10 data from said memories in the node devices while
reading out, from the tag memory, the tag information as
the information related to the data storage status in
said cache memories provided in the system,

judgment processing to judge whether the same
15 data as the data subject to said speculative readout is
found in any of the cache memories based on said tag
information read out, and

processing when the same data as the data subject
to said speculative readout is not found in any of the
20 cache memories to send said speculative readout data to
the processor in the self node device and,

processing when the same data as the data subject
to said speculative readout is found in one of the cache
memories to acquire such data in said cache memory and

25 send said data to the processor in the self node device.

14. A computer readable memory storing a data access
program for controlling the data access in a network
system as set forth in Claim 13 wherein

 said data access program

5 abolishes said speculative readout data when
acquiring the data in said cache memory and send such
data to the processor in the self node device.

15. A computer readable memory storing a data access
program for controlling the data access in a network
system as set forth in Claim 13 wherein

 said data access program

5 speculatively reads out the data from the
memories in the self node device while reading out said
tag information from the tag memory.

16. A computer readable memory storing a data access
program for controlling the data access in a network
system as set forth in Claim 13 wherein

 said data access program

5 speculatively reads out the data from the
memories in the other node device while reading out said
tag information from the tag memory.